

Appl. No. 09/834,431
Amtd. Dated September 12, 2005
Reply to Office Action of June 13, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. Canceled.
2. Canceled.
3. Canceled.

4. (Currently Amended) ~~The solid-state image pickup apparatus as recited in claim 1,~~

A solid-state image pickup apparatus, comprising:

an XY address type solid-state image pickup element in which pixels are
arranged in a matrix and color filters are formed at respective pixels;

frequency changing means for changing a clock frequency of a system when
thinning-out read is specified for the solid-state image pickup element; and

driving means for selecting pixels on the basis of the clock frequency changed
by the frequency changing means and in a sequence corresponding to a color coding
of both a row direction and a column direction to read out pixel signals

wherein:

the color coding is repeated in a unit, the unit being two rows and two columns, and

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the driving means successively reads out an addition signal of lower left pixels corresponding to the units, an addition signal of lower right pixels, an addition signal of upper left pixels, and an addition signal of upper right pixels.

5. Canceled
6. Canceled.
7. Canceled
8. Canceled.
9. Canceled.
10. Canceled.

11.(Currently Amended) ~~The method of driving the solid-state image pickup~~

~~apparatus as recited in claim 8,~~

A method of driving a solid-state image pickup apparatus using an XY address type solid-state image pickup element in which pixels are arranged in a matrix and color filters having a predetermined color coding are formed for the respective pixels, comprising the steps of:

changing a clock frequency for readout when thinning-out read is specified for the solid-state image pickup element; and

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reading out pixel signals by selecting the pixels on the basis of the
changed clock frequency and in a sequence corresponding to the color coding for both
a row direction and a column direction

wherein:

the color coding is repeated in a unit, the unit being two rows and two columns, and

four pixel signals are integrated, the integration comprising an addition signal of lower left pixels, an addition signal of lower right pixels, an addition signal of upper left pixels, and an addition signal of upper right pixels.

12. Canceled.

13. Canceled.

14. Canceled.